Shadow Banking: Out of the Eyes of Regulators

Many financial institutions that act like banks are not supervised like banks

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IF IT LOOKS LIKE A DUCK, quacks like a duck, and acts like a duck, then it is a duck—or so the saying goes. But what about an institution that looks like a bank and acts like a bank? Often it is not a bank—it is a shadow bank.

Shadow banking, in fact, symbolizes one of the many failings of the financial system leading up to the global financial crisis. The term "shadow bank" was coined by economist Paul McCulley in a 2007 speech at the annual financial symposium hosted by the Kansas City Federal Reserve Bank in Jackson Hole, Wyoming. In McCulley's talk, shadow banking had a distinctly US focus and referred mainly to nonbank financial institutions that engaged in what economists call maturity transformation. Commercial banks engage in maturity transformation when they use deposits, which are normally short term, to fund loans that are longer term. Shadow banks do something similar. They raise (that is, mostly borrow) short-term funds in the money markets and use those funds to buy assets with longer-term maturities. But because they are not subject to traditional bank regulation, they cannot—as banks can—borrow in an emergency from the Federal Reserve (the US central bank) and do not have traditional depositors whose funds are covered by insurance; they are in the "shadows."

Home mortgages

Shadow banks first caught the attention of many experts because of their growing role in turning home mortgages into securities. The "securitization chain" started with the origination of a mortgage that then was bought and sold by one or more financial entities until it ended up part of a package of mortgage loans used to back a security that was sold to investors. The value of the security was related to the value of the mortgage loans in the package, and the interest on a mortgage-backed security was paid from the interest and principal homeowners paid on their mortgage loans. Almost every step from creation of the mortgage to sale of the security took place outside the direct view of regulators.

The Financial Stability Board (FSB), an organization of financial and supervisory authorities from major economies and international financial institutions, developed a broader definition of shadow banks that includes all entities outside the regulated

banking system that perform the core banking function, credit intermediation (that is, taking money from savers and lending it to borrowers). The four key aspects of intermediation are

maturity transformation: obtaining short-term funds to invest in longer-term assets;

liquidity transformation: a concept similar to maturity transformation that entails using cash-like liabilities to buy harder-to-sell assets such as loans;

leverage: employing techniques such as borrowing money to buy fixed assets to magnify the potential gains (or losses) on an investment;

credit risk transfer: taking the risk of a borrower's default and transferring it from the originator of the loan (or the issuer of a bond) to another party.

Under this definition shadow banks would include broker-dealers that fund their assets using repurchase agreements (repos). In a repurchase agreement an entity in need of funds sells a security to raise those funds and promises to buy the security back (that is, repay the borrowing) at a specified price on a specified date.

Money market mutual funds that pool investors' funds to purchase commercial paper (corporate IOUs) or mortgage-backed securities are also considered shadow banks. So are financial entities that sell commercial paper (or other short-term obligations) and use the proceeds to extend credit to households (called finance companies in many countries). There are now myriad types of entities performing these intermediation functions, and they are growing all the time.

Why there is a problem

As long as investors understand what is going on and such activities do not pose undue risk to the financial system, there is nothing inherently shadowy about obtaining funds from various investors who might want their money back within a short period and investing those funds in assets with longer-term maturities. Problems arose during the global financial crisis, however, when investors became skittish about what those longer-term assets were really worth and many decided to withdraw their funds at once. To repay these investors, shadow banks had to sell assets. These "fire sales" generally reduced the value of those assets,

forcing other shadow banking entities (and some banks) with similar assets to reduce the value of those assets on their books to reflect the lower market price, creating further uncertainty about their health. At the peak of the crisis, so many investors withdrew or would not roll over (reinvest) their funds that many financial institutions—banks and nonbanks—ran into serious difficulty.

Had this taken place outside the banking system, it could possibly have been isolated and those entities could have been closed in an orderly manner. But real banks were caught in the shadows, too. Some shadow banks were controlled by commercial banks and for reputational reasons were salvaged by their stronger bank parent. In other cases, the connections were at arm's length, but because

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shadow banks had to withdraw from other markets—including those in which banks sold commercial paper and other short-term debt—these sources of funding to banks were also impaired. And because there was so little transparency, it often was unclear who owed (or would owe later) what to whom.

In short, the shadow banking entities were characterized by a lack of disclosure and information about the value of their assets (or sometimes even what the assets were); opaque governance and ownership structures between banks and shadow banks; little regulatory or supervisory oversight of the type associated with traditional banks; virtually no loss-absorbing capital or cash for redemptions; and a lack of access to formal liquidity (for example, central bank funds) support to help prevent fire sales.

Issues continue

Shadows can be frightening because they obscure the shapes and sizes of objects within them. The same is true for shadow banks. Estimating the size of the shadow banking system is particularly difficult because many of its entities do not report to government regulators. In the run-up to the global financial crisis, the shadow banking system appeared to be largest in the United States, but nonbank credit intermediation was present in other countries—and is growing again—particularly in China. Since 2011, the FSB has conducted a "global" monitoring exercise to examine all nonbank credit intermediation. The exercise, mandated by the 20 major advanced and emerging market economies (the G20), now covers 28 jurisdictions and the euro area. The original results were rough because they used a catchall category of "other financial institutions," but now the FSB also examines shadow banks by "function" rather than entity.

Using the entity-based measure, the latest report (end-2015 data) shows that the euro area shadow banking system is now the largest globally, comprising 33 percent of the total (up from 32 percent in 2011), whereas the US shadow banking system has declined from 33 percent to 28 percent. Across the jurisdictions contributing to the FSB exercise, the global shadow system peaked at \$62 trillion in 2007, declined to \$59 trillion during the crisis, and rebounded to \$92 trillion by the end of 2015. The "functional" categorization (a narrower categorization of 27 jurisdictions) shows that of the total \$34.2 trillion, the largest part of shadow banking is made up of asset-management-type activities—some 22 percent of the total.

Even though the FSB's move to examine activities (rather than institutions) comes closer to measuring risks, the measure still falls short of an accurate gauge of risks that shadow banking poses to the financial system. The FSB also does not measure the amount of debt used to purchase assets (often called leverage), the degree to which the system can amplify problems, or the channels through which problems move from one sector to another (although there has been some attempt to gauge these latter linkages using balance sheet data between nonbanks and banks).

Over time, it has been recognized that shadow banking in some countries is encroaching on banks' credit intermediation role. The true risks of these activities and whether they are systemically important are still undetermined, but the ability to monitor their size is improving.

Authorities engage

Since the global financial crisis, the official sector is collecting more and better information and searching for hidden vulnerabilities. Banking supervisors are examining the exposure of traditional banks to shadow banks and trying to contain it through better capital and liquidity regulations—because this exposure allowed shadow banks to affect the traditional financial sector and the economy more generally. Moreover, because many shadow banking entities were either lightly regulated or outside the purview of regulators, many authorities have expanded the scope of information reporting, and some have altered the regulatory perimeter to capture shadow-banking entities and the markets they use. And the authorities are trying to discourage shadow banks from tailoring their behavior to come under the supervision of the weakest (or of no) regulators—domestically or globally.

The authorities are making progress, but they work in the shadows themselves—trying to piece together disparate and incomplete data to see what, if any, systemic risks are associated with the various activities, entities, and instruments that comprise the shadow banking system.

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